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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,306	11/26/2001	Troy A. Miller	DP-306204	8684

7590

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EXAMINER

NGUYEN, XUAN LAN T

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/994,306

Applicant(s)

MILLER ET AL.

Examiner

Lan Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Attachment #1.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1 and 6 claim "a body portion having a fluid path therethrough" and "the fluid path comprises a primary path and a secondary path wherein the secondary path is blocked during a compression stroke and a rebound stroke when the valve spool is in a closed position". In reviewing the specification, the valve spool 100 has one fluid path therethrough entering at 104 and exiting at two slots 102 as shown in figure 3. The specification further describes a primary fluid path going around the valve spool, entering at 63 and exiting at 48, and a secondary fluid path going through the valve spool, entering at 104 and exiting at 102, on page 6. It is clear that there is only one fluid path therethrough within the body portion of the valve spool comprising only a secondary fluid path wherein the secondary path is blocked during a compression stroke and a rebound stroke when the valve spool is in a closed position. In an effort to further prosecution on this application. Claims 1-12 are being examined as having the

limitation of "wherein the fluid path is blocked during a compression stroke and a rebound stroke when the valve spool is in a closed position".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Steer et al.

Re: claim 1, Steer et al. show a valve spool for a suspension damper, as in the present invention, comprising: a body portion 11 having a fluid path 18 therethrough and an upper edge 14 wherein said fluid path is blocked during a compression stroke and a rebound stroke when the valve spool is in a closed position as shown in figure 2; a bridge 15 connected to the body portion, the bridge extending at least partially beyond the upper edge of the body portion as shown in figure 1.

Re: claims 2-5, as shown in figure 1. Steer further shows slot 17.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steer et al. in view of Watanabe.

Re: claim 6, Steer shows a valve for a suspension damper, as in the present invention, comprising: a valve spool including a body portion 11 having a fluid path 18 therethrough and having an upper edge 14 wherein said fluid path is blocked during a compression stroke and a rebound stroke when the valve spool is in a closed position as shown in figure 2; a bridge 15 connected to the body portion, the bridge extending at least partially beyond the upper edge of the body portion as shown in figure 1; an actuating pin 22 in contact with the bridge to open and close the valve spool. Steer's valve comprises the same elements as the claimed invention. However, Steer's stem 22 moves to open and close the valve while in the claimed invention, the body portion 11 moves to open and close the valve. It is observed that Steer's valve and the claimed invention's valve comprises the same elements with reversed motions of the elements to accomplish the same task. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have reversed the motions of the stem and the valve body to accomplish the same task of opening and closing the valve; since it has been held that a mere reversal of essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. Steer is silent of how the valve is actuated. Watanabe teaches an actuation device to open and close a valve wherein the actuation device comprises an expansible chamber 82, the expansible chamber

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expanded by a sprung mass suspended by the suspension damper, as shown in figure 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an actuation device such as taught by Watanabe to actuate the actuating pin of Steer in order to open and close the valve for the suspension damper; since actuating device actuated by an expansible chamber is a well known method of actuating in the art of suspension in order to utilize the readily available pressurized air in the system.

Re: claims 7-10, as shown in figure 1. Steer further shows slot 17.

Re: claim 11, it is inherent that said slot would register with an aperture in the bore in order for fluid to flow in and out of said bore.

Re: claim 12, Steer further shows spring 29 biasing the stem 22 to close said valve. This motion is the reverse of the spring biasing the valve body to close said valve, as discussed above.

7. Claims 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of de Carbon.

Watanabe shows a suspension damper, as in the present invention, comprising: a cylinder tube 3 with a fluid chamber; a piston 42, 48, 60, 70 supported in the cylinder tube for back and forth linear translation and dividing the fluid chamber into a compression chamber and a rebound chamber; and a valve 20, 22 including a valve spool movable in a bore in the piston, the valve spool having a body portion with an upper edge and a bridge connected to the body portion and extending at least partially beyond the upper edge of the body portion, and an actuating pin 30 in contact with the

bridge to move the valve spool between an open position and a closed position, please see attachment #1. Watanabe lacks a gas cup dividing the cylinder tube into a gas filled gas chamber and a fluid filled fluid chamber. De Carbon shows a suspension damper with a gas cup 3 dividing the cylinder tube 1 into a gas filled gas chamber 5 and a fluid filled fluid chamber above the gas cup 3 in figure 1 to accommodate the changes in the fluid chamber during a compression and a rebound stroke. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Watanabe's suspension damper with a gas cup such as taught by de Carbon to accommodate the changes in the fluid chamber during a compression and a rebound stroke as taught by de Carbon to further providing a more comfortable ride.

Re: claims 14 and 15, as marked on attachment #1, Watanabe shows the bridge has a lower edge, and a majority of the lower edge extends at least partially beyond the upper edge of the body portion.

Re: claim 16, Watanabe shows the body portion is generally cylindrical.

Re: claims 17 and 18, as marked on attachment #1, Watanabe shows the bridge defines at least one slot adapted to register with an aperture in the bore.

Re: claim 19, Watanabe further shows spring 38 adapted to bias the valve spool to a closed position.

Remarks

8. Applicant argues that Steer's valve does not comprise a primary and a secondary fluid paths through the valve spool body portion. That is true. Applicant's valve also

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does not comprise a primary and a secondary fluid paths through the valve spool body portion as discussed in the 112, 1st rejection above.

9. Further reviewing of the application shows that claims 13-19 are not defining over the prior art of record. A new rejection for claims 13-19 is set forth above. The Examiner is thereby withdrawing the allowability of claims 13-19 as indicated before. The Examiner apologizes for any inconveniences she might have caused.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is 703-308-8347. The examiner can normally be reached on M-F, 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4177.

Lan Nguyen 10/22/03

Lan Nguyen
Patent Examiner
A. U. 3683